

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln No. : 10/594,096
Confirm. No.: 6903
Applicant(s): Yasushi OKUBO et al
Filed : September 25, 2006
For : TRANSPARENT CONDUCTIVE
FILM ...
Art Unit : 1794
Examiner : Gerard T. Higgins
Docket No. : 06660/HG
Customer No.: 01933

DECLARATION UNDER 37 CFR 1.132

I, YASUSHI OKUBO, do hereby make the following declaration:

I am a one of the coinventors of the invention described and claimed in the above-identified application.

I am a citizen of Japan residing in Tokyo, Japan. I received a Master's degree in Science from Kyoto University in March 1999. Since April of that year, I have been employed by Konica Corporation, now named as Konica Minolta Technology Center, Inc., the assignee of the above-identified application, and have engaged in research and development in the field of Organic Electronic Materials.

From Table 3, the sample 101 is seemingly most representative sample of Ito. Therefore, the sample 101 disclosed in Table 3 of Ito was prepared for evaluation.

Primer layer (A1) of the sample 101 was prepared in the same manner as disclosed in the paragraph [0158] and [0159] of Ito. Gas barrier layer (I-1) was prepared in the same manner as disclosed in the paragraph [0163].

The sample 101 has the following structure and exhibited the refractive index after subjected to the measurement refractive indexes of each layers.

<Layer Structure of Sample 101>

	Refractive index

Transparent conductive layer (ITO)	2.0

Barrier layer	1.46

Primer layer	1.47

Transparent plastic film	1.60

As are shown above, the order of the magnitude of refractive index is different from the order of the magnitude changes required by the present claim 1. The invention of claim 1 requires that the refractive index continuously or stepwise decrease from the surface of the transparent conductive film (ITP layer) to the outer surface of the transparent conductive film. As can be seen from the results reported above, sample 101 of Ito

does not meet this requirement of claim 1.

The requirement of claim 1 is not just an arbitrary requirement. The inventive effect obtained by requiring that the order of magnitude of refractive index decrease in the order as recited in the present claim 1 is described in page 16, lines 8-17 (corrected specification translation):

"As a result of the investigation by the inventors, it is found that the taking out efficiency of light can be considerably raised by providing a gas barrier layer between the transparent conductive layer having high refractive index and the plastic film, and between air and the plastic film when the refractive index of the gas barrier layer has a refractive index being middle of them. Thus an organic EL element emitting high luminance light can be obtained."

The above-described inventive effect of the present invention cannot be expected to be achieved from the sample 101 of Ito because it fails to exhibit the necessary refractive index change in its constituent layers.

Ito discloses many samples as shown in Table 3 of Ito. There are not disclosed any samples which exhibit the feature of the refractive index as required in the present claim 1.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001, of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: October 13, 2009

Yasushi Okubo,
YASUSHI OKUBO